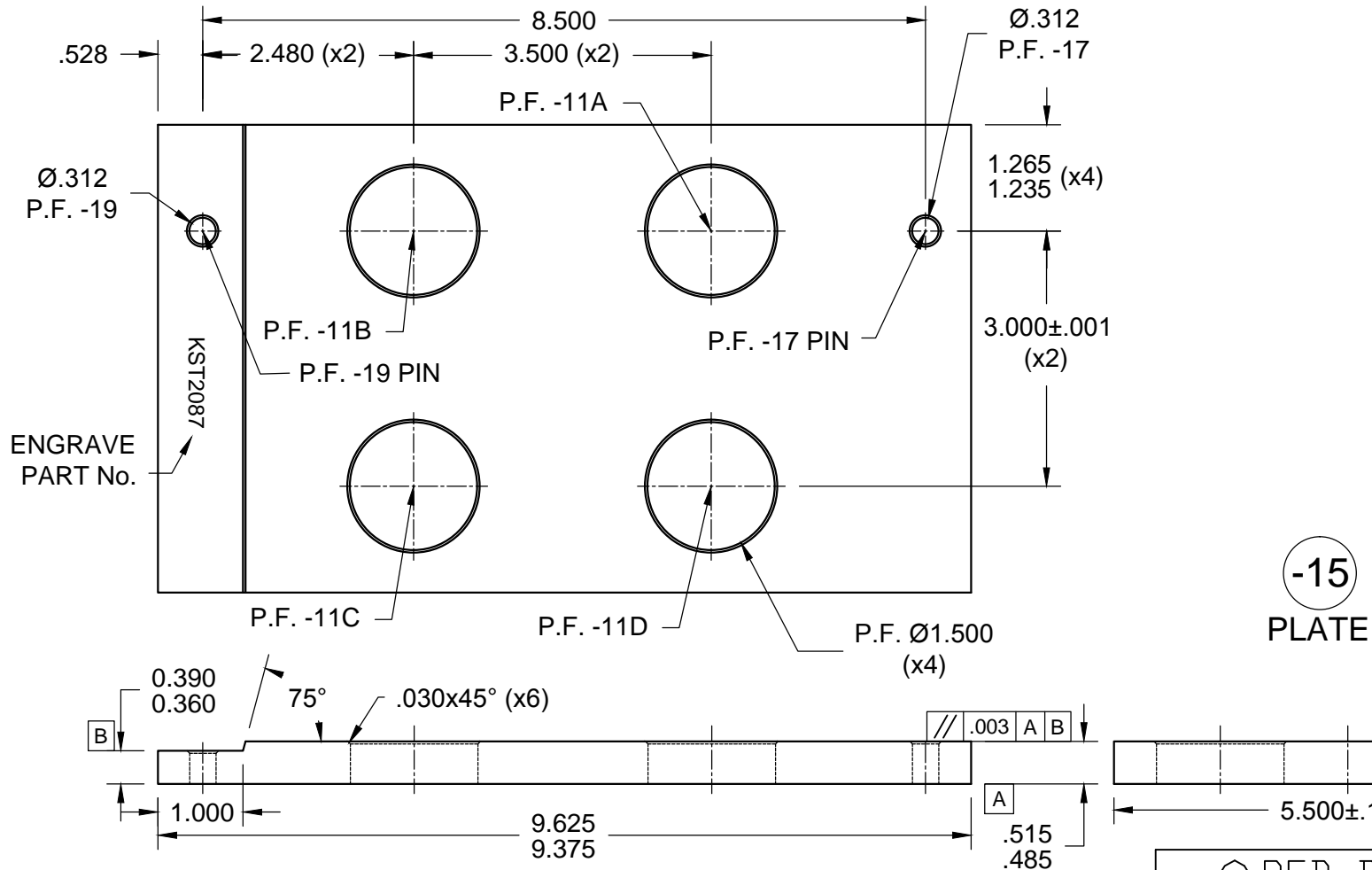
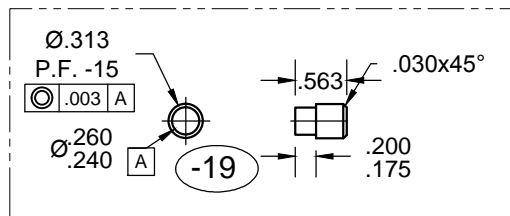
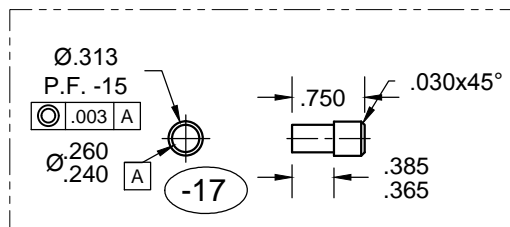
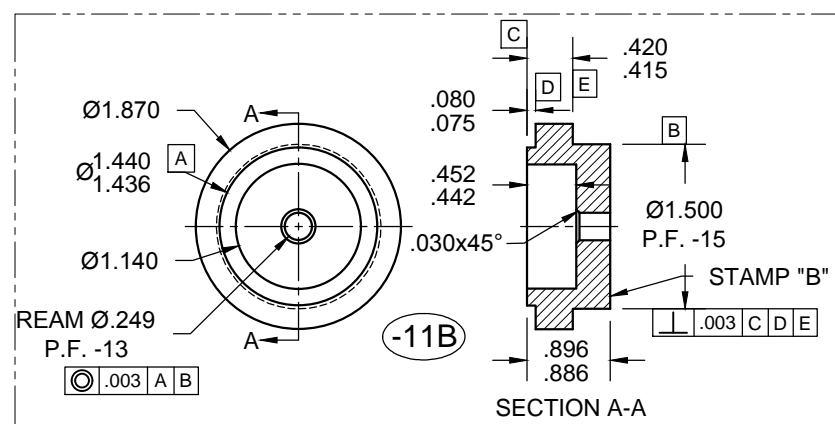
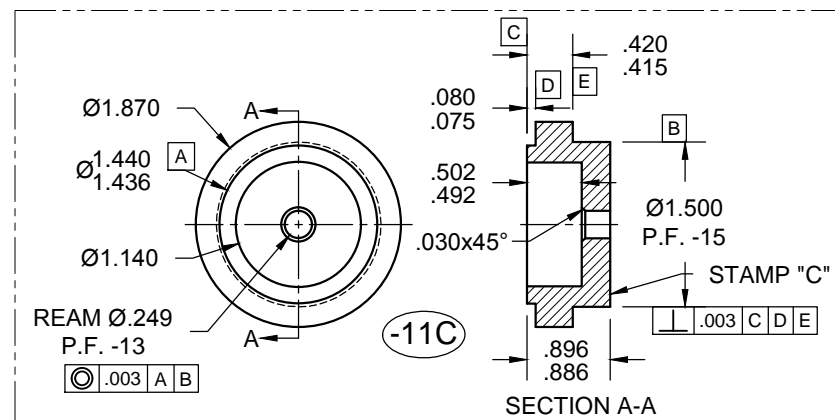



REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1B	ADDED MISSING DIM .63 & .97 -1, ADDED MISSING 8.500 -15. CH'D LIMIT DIMENSION .535-.505 TO .528 PER W.P.	5/5/10	RJC	RW

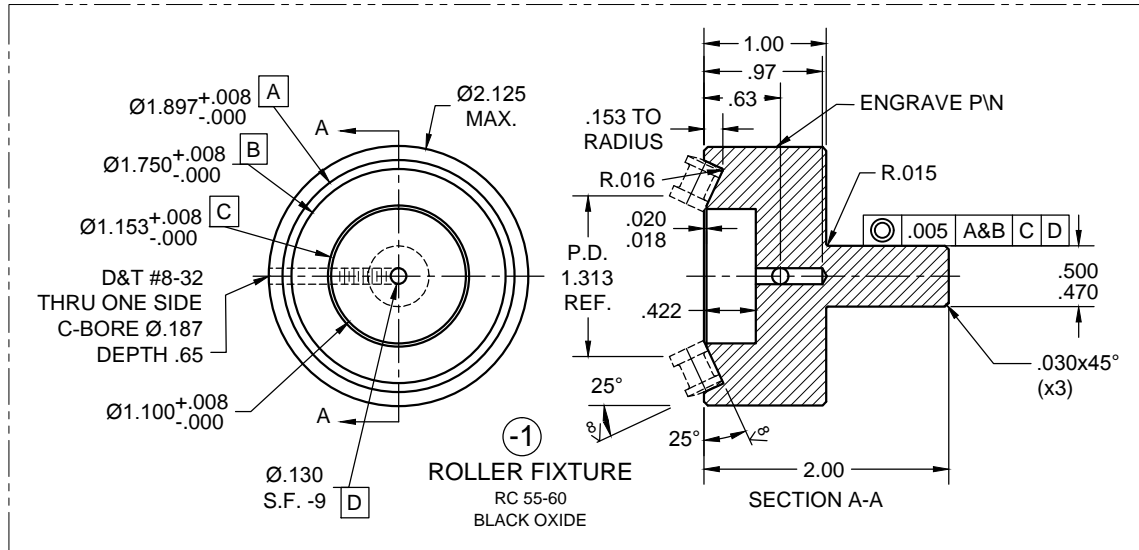


<b>RED BARN MACHINE</b>	
TITLE <b>FIXTURED SWAGING SYSTEM PLATE</b>	
DWG NO. <b>RBST2087-15</b>	REV <b>1B</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1	DRAWN BY: <b>PERRITT</b> APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC <b>BLACK OXIDE</b> USED ON MODEL
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE <b>NTS</b>	DATE <b>8-15-07</b> SHEET <b>4 of 4</b>

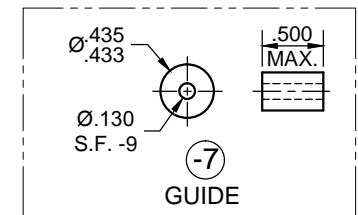
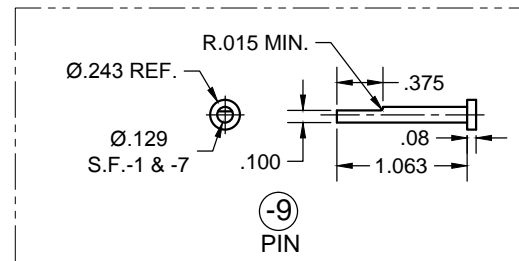
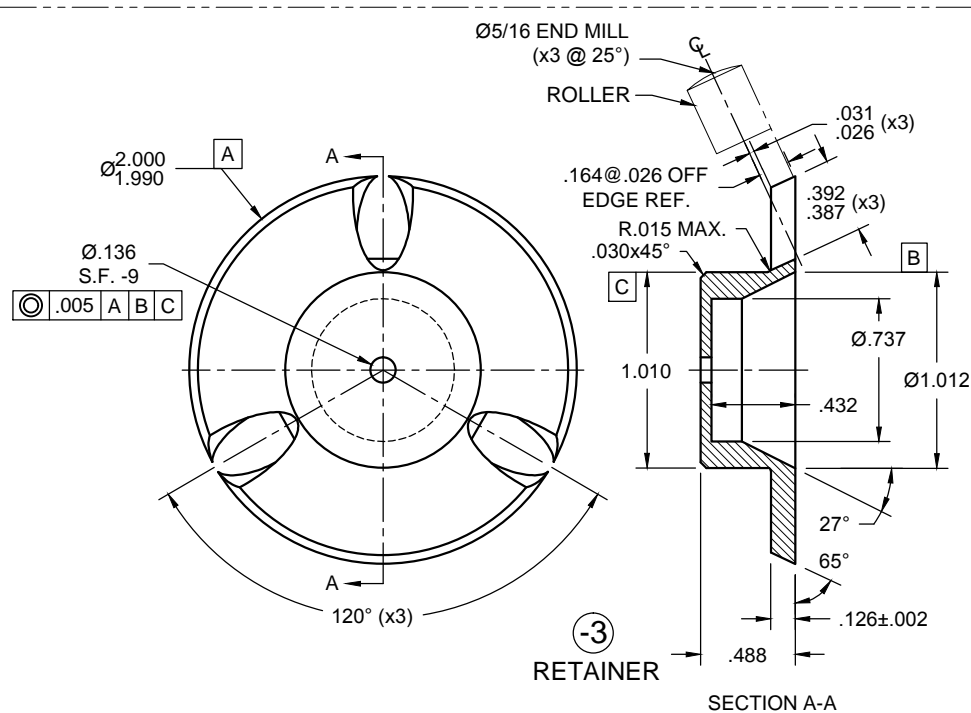
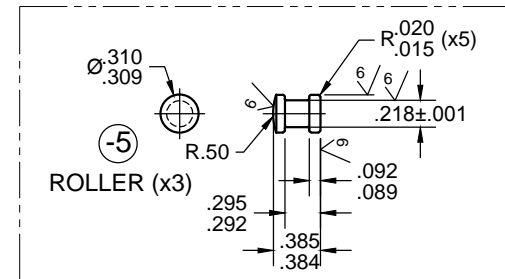


 <span>RED BARN MACHINE</span>			
TITLE FIXTURED SWAGING SYSTEM PARTS			
DWG NO. RBST2087-11 THRU -19		REV 1B	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		DRAWN BY: PERRITT APPROVED: <i>D Weid</i> HEAT TREAT: FINISH SPEC: BLACK OXIDE ALL USED ON MODEL	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		_____ _____ _____	
SCALE NTS	DATE 4-2-08	SHEET 3 of 4	

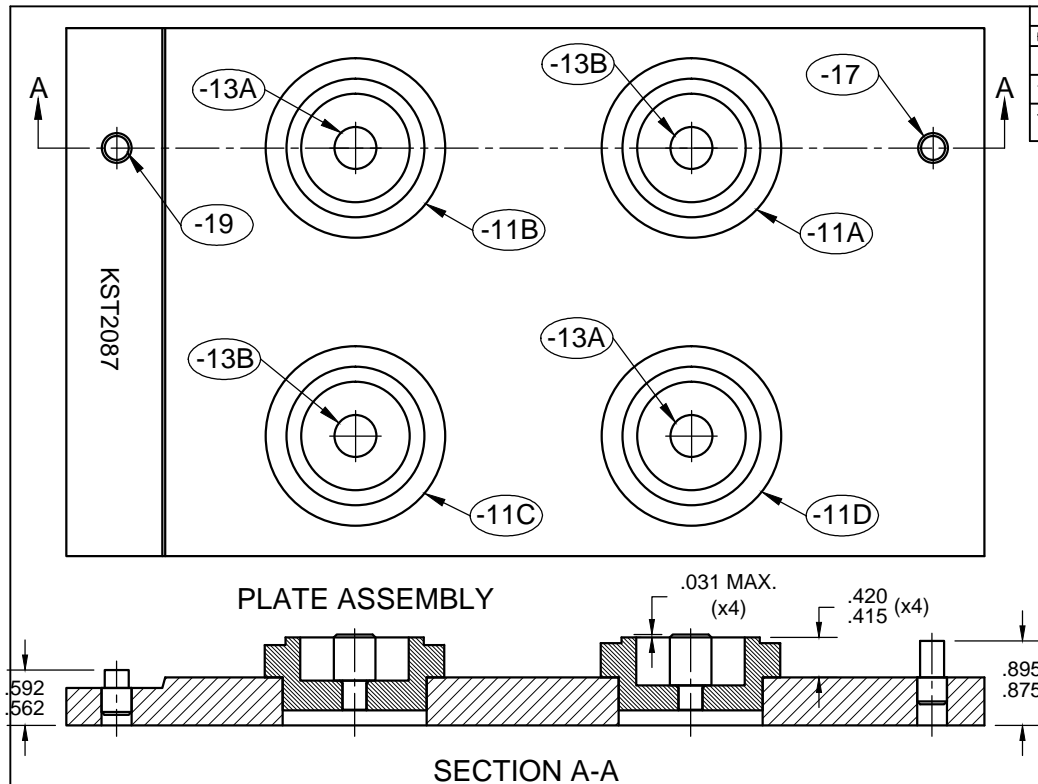
REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGED -7 SLEEVE TO -7 GUIDE, ADDED RADIUS TO -9 & INCREASED -5 RADIUS FROM .015 MAX.	7/7/08	WP	DW
1B	ADDED MISSING DIM .63 & .97 -1, ADDED MISSING 8.500 -15. CH'D LIMIT DIMENSION .535-.505 TO .528 PER W.P.	5/5/10	RJC	RW



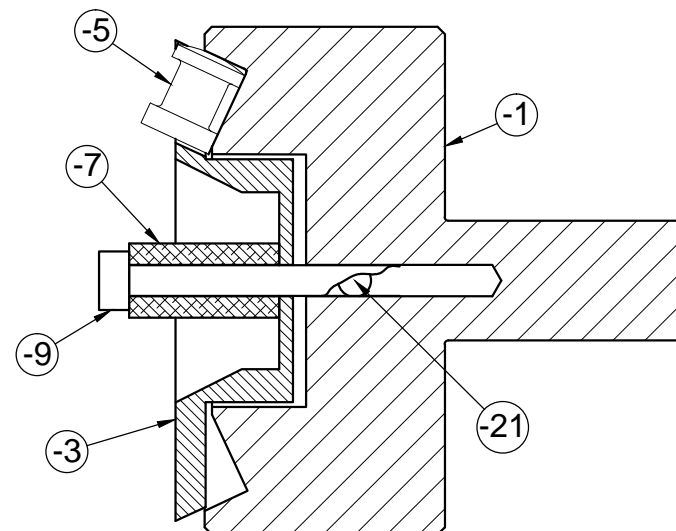
- NOTES**
1. -1 ROLLER RACE SURFACES MUST HAVE SMOOTH APPEARANCE, FREE FROM MACHINING MARKS AND GROOVES.
  2. DO FIRST ARTICLE INSPECTION ON -1 ROLLER FIXTURE BEFORE HEAT TREATING.



<b>RED BARN MACHINE</b>	
TITLE FIXTURED SWAGING SYSTEM PARTS	
DWG NO. RBST2087-1. THRU -9	REV 1B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1	
FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 4-2-08
SHEET 2 of 4	



REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGED -7 SLEEVE TO -7 GUIDE, ADDED RADIUS TO -9 & INCREASED -5 RADIUS FROM .015 MAX.	7/7/08	WP	DW
1A	CH'D T/N FROM KST2087.	11/19/09	RJC	
1B	ADDED MISSING DIM .63 & .97 -1, ADDED MISSING 8.500 -15. CH'D LIMIT DIMENSION .535-.505 TO .528 PER W.P.	5/5/10	RJC	RW



ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg.
			-1	1	ROLLER FIXTURE	0-1 DRILL ROD	Ø2-1/8 x 2-1/8	2
			-3	1	RETAINER	BRONZE RND. BAR	Ø2 x 5/8	2
		W/O	-5	3	ROLLER	STEEL	.310 MINUS GAUGE PIN MSC #89031009	2
			-7	1	GUIDE	BRONZE RND. BAR	Ø1/2 x 5/8	2
		W/O	-9	1	PIN	STEEL	MCMMASTER-CARR #98378A909	2
			-11A	1	SEAT	4140 RND. BAR	Ø1-7/8 x 1	3
			-11B	1	SEAT	4140 RND. BAR	Ø1-7/8 x 1	3
			-11C	1	SEAT	4140 RND. BAR	Ø1-7/8 x 1	3
			-11D	1	SEAT	4140 RND. BAR	Ø1-7/8 x 1	3
			-13A	2	LOCATING PIN	1018 RND. BAR	Ø1/2 x 7/8	3
			-13B	2	LOCATING PIN	1018 RND. BAR	Ø1/2 x 7/8	3
			-15	1	PLATE	4140 PLATE	1/2 x 5-1/2 x 9-5/8	4
			-17	1	PLATE PIN	1018 RND. BAR	Ø3/8 x 7/8	3
			-19	1	PLATE PIN	1018 RND. BAR	Ø3/8 x 3/4	3
		B/O	-21	1	SOCKET HEAD SET SCREW	STEEL, BLACK	#8-32 x 1/4	N/S
ASSY #								

<b>TITLE</b> FIXTURED SWAGING SYSTEM	
<b>DWG NO.</b> RBST2087	<b>REV</b> 1B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: PERRITT APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC SEE PARTS PAGES USED ON BEARINGS 222-312-753-101 222-312-753-103
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
<b>SCALE</b> NTS	<b>DATE</b> 4-2-08
<b>SHEET</b> 1 of 4	

NOT APPROVED FOR PRODUCTION



RED BARN MACHINE

NOT APPROVED FOR PRODUCTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

PART #	QTY	DESCRIPTION
-1	1	-

DRAWN BY: PERRITT	<div>RB</div> RED BARN MACHINE		
CHECKED	TITLE		
HEAT TREAT FINISH SPEC	TITLE		
USED ON MODEL ?	DWG NO. PART #		REV.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± .5° .X ± .1	SCALE NTS	DATE 1-28-06	SHEET 1 of 1
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING			


Technical drawing of a roller assembly. The drawing includes a side view and a cross-section view.

**Side View:**

- Roller diameter:  $\varnothing .310$  with a tolerance of  $.309$ .
- Roller label: **-5 ROLLER (x3)**.
- Roller radius:  $R.50$ .
- Shaft diameter:  $.218 \pm .001$ .
- Shaft radius:  $R.015 (x2)$ .
- Shaft length:  $.295$  and  $.292$ .
- Roller length:  $.385$  and  $.384$ .
- Roller offset:  $.092$  and  $.089$ .

**Cross-section View:**

- Roller diameter:  $\varnothing .310$  with a tolerance of  $.309$ .
- Roller label: **-5 ROLLER (x3)**.
- Roller radius:  $R.50$ .
- Shaft diameter:  $.218 \pm .001$ .
- Shaft radius:  $R.015 (x2)$ .
- Shaft length:  $.295$  and  $.292$ .
- Roller length:  $.385$  and  $.384$ .
- Roller offset:  $.092$  and  $.089$ .

 <b>RED BARN MACHINE</b>			
<b>TITLE</b> FIXTURE SWAGING SYSTEM ROLLER			
<b>DWG NO.</b> KST2087-5			<b>REV</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		<b>DRAWN BY:</b> PERRITT APPROVED HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		<b>USED ON MODEL</b>	
<b>SCALE</b> NTS	<b>DATE</b> 8-15-07	<b>SHEET</b> 1 of 1	